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(54) Title: MODULATION OF SKELETAL MUSCLE PRECURSOR CELL ACTIVATION

(57) Abstract: The present invention is directed to methods, pharmaceutical compositions and kits for modulating skeletal muscle precursor cell activation. Modulation is effected through the use of nitric oxide (NO), donors of NO, inhibitors of NO activity (NO inhibitor) or regulators of NO production, either locally or systemically. The invention further teaches the use of NO, an NO donor, an NO inhibitor or a regulator of NO production to modulate the effects of steroid hormone on skeletal muscle. The invention further provides a method for identifying a compound which effects a change in activation state of muscle precursor cells. A number of advantages is evident. By allowing skeletal muscle precursor cells to be manipulated directly, the invention enables specific treatments to regenerate and repair muscle, especially for the muscular dystrophies.